

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 (Currently amended). An isolated subpopulation of human adult bone marrow cells which are depleted of hematopoietic cells and mature leukocytes and in which at least 20% of the cells have a desired phenotype of which are CD45⁻, Lin⁻, and Sca⁺ and which are capable of differentiating the ability to home to the pancreas and differentiate into insulin-producing pancreatic islet cells.

Claim 2 (Cancelled).

3 (Currently amended). A cell isolated from the subpopulation of human adult bone marrow cells of claim 1 which is capable of differentiating has the ability to home to the pancreas and differentiate into an insulin-producing pancreatic islet cell.

4 (Currently amended). A composition comprising the isolated subpopulation of human adult bone marrow cells of claim 1 and a pharmaceutically-acceptable carrier, excipient, diluent or auxiliary agent.

5 (Currently amended - withdrawn). A method for treating a diabetic condition ~~in a mammal~~, comprising administering to ~~the mammal~~ a patient in need thereof a therapeutically effective amount of bone marrow, or an effective subpopulation thereof in accordance with claim 1.

Claim 6 (Cancelled).

7(Withdrawn). A method in accordance with claim 5, wherein the diabetic condition is type I diabetes.

8(Withdrawn). A method in accordance with claim 5, wherein the diabetic condition is type II diabetes.

9(Withdrawn). A method in accordance with claim 5, wherein the diabetic condition is a form of secondary diabetes selected from the group consisting of pancreatic diabetes, extrapancreatic/ endocrine diabetes, drug-induced diabetes, lipoatropic diabetes, myotonic dystrophy-associated diabetes and diabetes induced by disturbance of insulin receptors.

10(Withdrawn). A method in accordance with claim 5, wherein the bone marrow is autologous.

11(Withdrawn). A method in accordance with claim 5, wherein the bone marrow is non-autologous.

12(Withdrawn). A method in accordance with claim 11, wherein the non-autologous bone marrow is syngeneic or allogeneic bone marrow.

13(Withdrawn). A method in accordance with claim 5, wherein said effective subpopulation comprises a cellular composition consisting of greater than 20% bone marrow cells which are depleted of hematopoietic cells and matured leukocytes, wherein said bone marrow cells have a phenotype of CD45⁻, Lin⁻, and Sca⁺, as determined by RT-PCR, antibody staining and flow cytometry.

14(Withdrawn). A method in accordance with claim 5, wherein said bone marrow, or effective subpopulation thereof is administered in combination with purified recombinant granulocyte colony-stimulating

factor (G-CSF) or granulocyte macrophage-colony stimulating factor (GM-CSF) in an amount effective to stimulate mobilization of cells from bone marrow and differentiation into pancreatic islet cells.

15(Withdrawn). A method for stimulating the mobilization and differentiation of bone marrow derived cells into pancreatic islet cells, comprising treating bone marrow-derived cells with an effective stimulating amount of G-CSF and/or GM-CSF.

16(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 30% of the cells have said desired phenotype.

17(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 40% of the cells have said desired phenotype.

18(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 50% of the cells have said desired phenotype.

19(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 60% of the cells have said desired phenotype.

20(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 70% of the cells have said desired phenotype.

21(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 80% of the cells have said desired phenotype.

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22(New). The isolated subpopulation of human adult bone marrow cells of claim 1, in which at least 90% of the cells have said desired phenotype.